

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 16 and 21-23 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 16 only requires that “the first dispensers are formed on one side of the tables” and does not include the positioning of the second plurality of dispensers for forming the seal pattern. However, the specification only seems to teach that the first dispensers are formed on one side of a table and that the second dispensers are formed on the other side of the table opposite the side of the first dispensers (see [0062] and [0076] of the published application U.S. Publication No. 2005/0112283). For the purpose of this examination, the recitation will be interpreted to be inclusive of at least both interpretations.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Walker et al. (U.S. Publication No. 2002/0024628).

Walker discloses a method of making an LCD panel (abstract). A sealing material 150 can be dispensed onto a substrate using a syringe having a fluid dispensing system [0069]. The

syringe is used to supply sealing material to the substrate having a plurality of micro display areas 155 (i.e., a plurality of unit panels) (Fig. 7) through nozzles at the end of the syringe. A cross-over paste material can be dispensed onto the LCD substrate using a similar dispenser as used for the sealing material 150 (i.e., a syringe) [0074]. The cross-over material can be made of silver particles [0072].

Walker does not explicitly teach providing a plurality of syringes. However, it is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced (see MPEP 2144.04.VI.B.). Walker teaches that multiple sealing material patterns 150 are formed on the substrate for a plurality of micro display areas 155 (Fig. 7). The use of multiple dispensing syringes of Walker would have decreased the amount of time required for depositing onto the plurality of micro display areas. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used a plurality of syringes of Walker in the method of forming LCD panel of Walker with a reasonable expectation of success. One would have been motivated to do so in order to have reduced process time and costs.

Walker does not explicitly teach providing a plurality of tables. However, one of ordinary skill in the art would have expected the use of a single table or a plurality of tables in the formation of the sealing material and/or cross-over material patterns of Walker to have been similar and that the use of one over the other would have yielded predictable results. It is well settled that the mere duplication of parts has no patentable significance unless a new and unexpected result is produced (see MPEP 2144.04.VI.B.). Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used a plurality of tables each having a plurality of syringes with a reasonable expectation of success. One would have been motivated to do so in order to have formed sealing patterns and/or cross-over material patterns on multiple substrates at the same time.

Walker does not explicitly teach that at least two sealant dispensers are formed on one side of a table. However, the configuration of the dispensers on the table would have been merely a design choice. One of ordinary skill in the art could have placed the dispensers on one side of the table to maximize space on the side having no dispensers. Therefore, it would have

been obvious to one of ordinary skill in the art at the time of invention to have placed the dispensers on one side of the table for space requirements.

As to the requirement of the tables operating independently along a transferring path of the substrates, a stationary table is being interpreted to be operating independently along a transferring path of the substrate because a table that does not move is independent of the transfer path of the substrate.

Claim 21: Walker teaches that the unit panels include a plurality of picture display regions [0006].

5. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker '628 as applied to claim 16 above, and further in view of Yamamoto et al. (JP 61-055625, listed in the IDS filed 7/23/2007).

Walker does not explicitly teach that the unit panels include at least two different sizes. However, Yamamoto teaches that it was well known in the LCD art to have formed a plurality of unit panels of different sizes on a single substrate (Figs. 1-2). Because Yamamoto teaches that the use of such substrates was operable in the art, it would have been obvious to one of ordinary skill in the art at the time of invention to have formed a plurality of unit panels of different sizes on the substrate of Walker with a reasonable expectation of success. The selection of something based on its known suitability for its intended use has been held to support a prima facie case of obviousness (MPEP 2144.07).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Walker '628 as applied to claim 21 above, and further in view of Hashimoto et al. (U.S. Publication No. 2001/0013920).

Walker does not explicitly teach that the picture display regions have at least two different driving modes. However, Hashimoto teaches that the liquid crystal composition can be used in any mode [0068]. One of ordinary skill in the art would have used the mode of the liquid crystal necessary for the LCD substrates. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have used two different driving modes to the

picture display regions of Yamamoto with a reasonable expectation of success in order to have manufactured an LCD panel having the desired effects.

Response to Arguments

7. Applicant's arguments filed 11/2/2009 have been fully considered but they are not persuasive.

Applicant argues on pg. 7 that claim 16 has been amended to comply with the written description requirement of 35 U.S.C. 112, first paragraph. However, claim 16 only requires that “the first dispensers are formed on one side of the tables” and does not include the positioning of the second plurality of dispensers for forming the seal pattern. However, the specification only seems to teach that the first dispensers are formed on one side of a table and that the second dispensers are formed on the other side of the table opposite the side of the first dispensers (see [0062] and [0076] of the published application U.S. Publication No. 2005/0112283).

Applicant argues on pg. 7 that claim 16 recites “wherein the first dispensers are formed on one side of the tables and the second dispensers are formed on the other side of the tables”. However, the recitation of “and the second dispensers are formed on the other side of the tables” has a line struck through it. Thus, that limitation has not been considered under the merits.

Applicant argues on pg. 8 that when a dispenser for seal pattern and a dispenser for silver dot are respectively formed at both sides of one table, a seal process and a silver dot process may be performed all in the same apparatus, and accordingly processing steps may be reduced in comparison with a case performing the sealing process and the silver process separately. However, the claims do not require a specific configuration of the plurality of second dispensers.

Applicant argues on pg. 8 that claims 21-23 are allowable due to their dependency to claim 16. However, claim 16 is being rejected. Claims 21-23 are additionally rejected. See rejections above for details.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy Lin whose telephone number is (571)272-8902. The examiner can normally be reached on Monday thru Friday 8AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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